

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended) A method of message communication management within a communication network, the method comprising the steps of:

forming one or more multicast groups comprising one or more subscriber devices operating within the communication network;

at an access point:

receiving information about the formed one or more multicast groups;

receiving an internet group management protocol (IGMP) join message, wherein the IGMP message comprises information about a multicast group that a first subscriber is joining;

storing a presence table comprising in a storage medium the information about the multicast group, wherein the storage medium comprises a list of wireless subscriber units along with their membership to at least one multicast group and whether the subscriber unit is associated with the access point using the received information;

updating the presence table upon receipt of an internet group management protocol (IGMP) join message, wherein the IGMP message comprises information about a multicast group that a first subscriber is joining;

receiving a multicast packet intended for a particular multicast group;

determining by consulting the presence table storage medium whether there is at least one wireless subscriber unit belonging to the particular multicast group and whether the at least one wireless subscriber unit is currently associated with the access point; and

rebroadcasting the multicast packet over a wireless segment only if there is at least one wireless subscriber unit belonging to the particular multicast group and associated with the access point.

2. (original) The method of claim 1 further comprising the step of rebroadcasting the multicast packet over a wired segment.
3. (withdrawn) The method of claim 1 wherein the step of determining comprises consulting a storage medium, wherein the storage medium comprises a list of wireless subscriber units along with their membership to at least one multicast group and whether the subscriber unit is currently associated with the access point.
4. (currently amended) The method of claim 1 [[3]] further comprising the step of updating the presence table ~~storage medium~~ by detecting Internet Group Management Protocol (IGMP) messages from wireless subscriber units.
5. (currently amended) The method of claim 1 [[3]] further comprising the step of updating the presence table ~~storage medium~~ by receiving Inter-Access Point Protocol (IAPP) messages from at least a second access point.
6. (currently amended) The method of claim 1 [[3]] further comprising updating the ~~storage medium~~ presence table by removing an entry from the presence table ~~storage medium~~ based on inactivity from a wireless subscriber unit after a predetermined period of time lapses.
7. (original) The method of claim 1 wherein the step of rebroadcasting occurs if there is at least one wireless subscriber unit belonging to the particular multicast group and associated with the access point that did not originate the multicast packet.

8. (currently amended) A method comprising the steps of:
at an access point:

receiving an internet group management protocol (IGMP) message, wherein the IGMP message comprises information about a particular multicast group to update a storage medium with information about multicast groups, wherein the storage medium comprises a list of wireless subscriber units along with their membership to at least one multicast group and whether the subscriber unit is associated with the access point;

wirelessly receiving a multicast packet intended for a particular multicast group;
rebroadcasting the multicast packet over a wired segment; and

rebroadcasting the multicast packet over a wireless segment if the multicast packet signals an automatic rebroadcast of the multicast packet over the wireless segment; otherwise, rebroadcasting the multicast packet over the wireless segment ~~only~~ if there is at least one wireless subscriber unit belonging to the particular multicast group and associated with the access point that did not originate the multicast packet determined by consulting the storage medium.

9. (original) The method of claim 8 wherein a bit in the multicast packet signals the automatic rebroadcast of the multicast packet.

10. (original) The method of claim 8 wherein a field in the multicast packet signals the automatic rebroadcast of the multicast packet.

11. (original) The method of claim 8 wherein the multicast packet is originated from a wireless subscriber unit.

12. (currently amended) A method comprising the steps of:
- at a subscriber unit:
 - storing an association with at least one multicast group;
 - sending an internet group management protocol (IGMP) join message, wherein the IGMP message comprises information about one of the at least one ~~[[a]]~~ multicast group that ~~a first~~ the subscriber is joining;
 - generating a multicast packet intended for ~~a particular~~ the at least one multicast group;
 - setting a first value within the multicast packet if the subscriber unit desires a rebroadcast of the multicast packet; otherwise setting a second value within the multicast packet; and
 - transmitting the multicast packet.